

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method of modulating the amount or biological activity of thrombospondin 2 or osteopontin in an animal, said method comprising the step of introducing into the animal an amount of a molecule, selected from the group consisting of osteopontin and a thrombospondin 2 antagonist, effective to modulate the amount or biological activity of thrombospondin 2 or osteopontin in the animal.

2. The method of Claim 1 wherein an antagonist of thrombospondin 2 is introduced into the animal.

3. The method of Claim 2 wherein the amount or biological activity of thrombospondin 2 is decreased by said antagonist of thrombospondin 2.

4. The method of Claim 2 wherein the thrombospondin 2 antagonist is selected from the group consisting of an antisense thrombospondin 2 nucleic acid molecule, an anti-thrombospondin 2 antibody, a thrombospondin 2 blocking peptide and a thrombospondin 2 ribozyme.

5. The method of Claim 4 wherein an antisense thrombospondin 2 nucleic acid molecule is introduced into the animal.

6. The method of Claim 5 wherein the antisense thrombospondin 2 nucleic acid molecule is at least ninety percent identical to the complement of a thrombospondin 2 cDNA consisting of the nucleic acid sequence set forth in SEQ ID NO. 3.

7. The method of Claim 5 wherein the antisense thrombospondin 2 nucleic acid molecule hybridizes under stringent conditions to a thrombospondin 2 cDNA molecule consisting of the nucleic acid sequence set forth in SEQ ID NO. 3.

8. The method of Claim 4 wherein an anti-thrombospondin 2 antibody is introduced into the animal.

9. The method of Claim 4 wherein a thrombospondin 2 blocking peptide is introduced into the animal.

10. The method of Claim 4 wherein a thrombospondin 2 ribozyme is introduced into the animal.

11. The method of Claim 1 wherein osteopontin is introduced into the animal.

12. The method of Claim 1 wherein the molecule is introduced into the animal by a method selected from the group consisting of injection, as a component of a lipid complex, as a component of an implanted porous matrix, and by immobilization onto an implanted surface.

13. The method of Claim 5 wherein an antisense thrombospondin 2 nucleic acid molecule is incorporated within a delivery device which is introduced into the animal.

14. The method of Claim 13 wherein the delivery device comprises a porous matrix wherein the thrombospondin 2 antisense nucleic acid molecule is disposed.

15. The method of Claim 1 wherein the animal is exhibiting a wound response, and the amount of the introduced molecule is effective to [reduce] improve the wound response.

16. The method of Claim 15 wherein the molecule is an antisense thrombospondin 2 nucleic acid molecule.

17. The method of Claim 1 wherein osteopontin and an antagonist of thrombospondin 2 are introduced into the animal.

18. The method of Claim 17 wherein the antagonist to thrombospondin 2 is an antisense thrombospondin 2 nucleic acid molecule.

19. A medical device comprising:

(a) a device body; and

(b) a surface layer attached to the device body, said surface layer comprising an amount of an agonist or antagonist of a matricellular protein sufficient to reduce the foreign body response against the device, wherein said device is adapted to be affixed to, or implanted within, the soft tissue of an animal.

20. The medical device of Claim 19 wherein the device is selected from the group of devices consisting of wholly implanted medical devices, partially implanted medical devices, and surface medical devices.

21. The medical device of Claim 19 wherein the surface layer attached to the device body comprises a porous matrix.

22. The medical device of Claim 19 further comprising a multiplicity of surface of layers disposed one upon the other, wherein at least one of said surface layers comprises an agonist or antagonist of a matricellular protein.

23. The medical device of Claim 22 wherein the device comprises: (a) a first surface layer comprising a first agonist, or first antagonist, of a matricellular protein; and (b) a second surface layer comprising a second agonist, or second antagonist, of a matricellular protein, wherein said first agonist is different from said second agonist and said first antagonist is different from said second antagonist.

24. The medical device of Claim 22 wherein the device comprises: (a) a first surface layer comprising osteopontin; and (b) a second surface layer comprising a thrombospondin 2 antagonist, wherein said first surface layer is disposed external to said second surface layer.

25. The medical device of Claim 24 wherein said thrombospondin 2 antagonist is an antisense nucleic acid molecule.

27. The method of Claim 1 wherein the animal is exhibiting a foreign body response, and the amount of the introduced molecule is effective to reduce the foreign body response.

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